



An ISO 9001 Company

## **Bharat Heavy Electricals Limited**

**High Pressure Boiler Plant  
Non Destructive Testing Laboratory  
Tiruchirappalli-620014**

**Phone: 0431-257- 5877**

**Fax: 0431-2576808**

**E-Mail: tguru@bheltry.co.in**

**ENQUIRY.NO: BHE: Q: NDT: MPI: 002 DATED: 25/11/2015**

**ENQUIRY FOR OUTSOURCING OF MAGNETIC PARTICLE TESTING  
CONTRACT AT *BHEL, TRICHY***

**TENDER SUBMISSION: LAST DATE & TIME**

**21-12-2015 (MONDAY) – 12:00 HRS (IST)**

**TENDER OPENING TIME**

**21-12-2015 (MONDAY) - 14:00 HRS (IST)**

**ADDRESS FOR COMMUNICATION**

**ADDITIONAL GENERAL MANAGER**

**NON DESTRUCTIVE TESTING  
LABORATORY**

**BUILDING-01/ BHEL**

**TRICHY-620014**

**PART-A**

**QUALIFYING CRITERIA FOR MAGNETIC PARTICLE TESTING**

**CONTRACT AT BHEL TRICHY**

<b>S.NO</b>	<b>PARTICULARS</b>	<b>BIDDER'S RESPONSE</b>
<b>1</b>	NDTL Department BHEL Tiruchirappalli is inviting one experienced and reputed NDT agency, for carrying out Magnetic Particle Inspection meeting conditions as stipulated in this enquiry. The activities include Magnetic Particle testing for the items as given in Annexure-III and report generation for the same using BHEL SAP System.	
<b>2</b>	Minimum three years of experience in the MAGNETIC PARTICLE TESTING of welds & Raw materials for Power Plant Equipments during Manufacturing which shall include Raw Material such as Steel Plates, castings, forgings pipe fittings & rounds ) and butt & full penetration corner & tee welds in boiler-drums, headers, piping, Pressure vessels Heat-exchangers, Valves, Advanced technology products components as per International Codes and Standards	
<b>3</b>	Reference List of Customers and Performance Certificate from CUSTOMERS (minimum ONE Customer) with full contact details.	
<b>4</b>	The MPI Operators deployed by the vendor shall have minimum qualification of Diploma in Mechanical Engineering / Degree in Science or Engineering and with certification in MT Level II. They shall have a minimum of 2 years' experience in Magnetic particle testing.	
<b>5</b>	Vendor shall have at least Nine (including one for preparing reports) Level II MPI operators trained & Certified as per International certification schemes such as SNT-TC -1A.	
<b>6</b>	Vendor shall submit the details of certified personal as per above clause.	
<b>7</b>	Vendor shall ensure workmen are covered under PF, ESI and miscellaneous provisions act of 1952 and accordingly produce documents to BHEL management	

## PART-B

### TECHNICAL SPECIFICATIONS FOR MAGNETIC PARTICLE TESTING CONTRACT AT BHEL/TRICHY

S.NO	PARTICULARS	VENDORS RESPONSE
1.0	Sealed quotations are invited from well-established, reliable and experienced firms for Magnetic Particle Testing (MPI) of materials and Weldments.	
2.0	<b>EXPERIENCE:</b> Vendor shall have experience in Magnetic particle inspection (MPI) of welds (fillets, attachments and butt welds in steel components(Carbon steel, low alloy, High Alloy Steels) and raw material of valve casting (WC 6, WC 9, C12 A). The MPI testing shall be performed as per BHEL procedures and technique sheets.	
3.0	<b>SCOPE:</b> The Magnetic particle testing of weldments in Boiler components shall be carried out in accordance with BHEL approved procedures / Technique sheet using BHEL equipments and consumables and the trained and certified man power by Vendor.	
4.0	The Vendor shall be required to operate inside BHEL premises in all Boiler Manufacturing shops.	
5.0	<b>WORKING HOURS:</b> Required to work in two shifts 8.00 Am to 4.30Pm and 14.00 Hours to 22.00 Hours. <b>Holidays and Sundays:</b> When required the operators should work on holidays also.	
6.0	<b>MINIMUM EDUCATIONAL QUALIFICATION, TRAINING AND CERTIFICATION OF OPERATORS DEPLOYED AT BHEL:</b> MPI shall be performed by persons with minimum educational qualification (DME/B.Sc/B.E/B.Tech) and qualified Level II (in MPI) trained and qualified operators In accordance with SN TC 1A of ASNT.	
7.0	The Vendor shall furnish the photo copies qualified Level II (in MPI) certificate of the personnel deployed at BHEL and produce the original for verification on award of contract.	
8.0	The vendor shall deploy at least four (4) batches comprising of (eight) 8 personnel and one person for supervising and preparing reports ,all are required to be qualified in MPI Level-II	
9.0	<b>COMPETANCE:</b> On award of contract, the operator identified for the above job will be subjected to interview by BHEL/ NDT for ensuring the competence of the operator and only those operators approved by BHEL will be permitted to perform the job. The operators failed to clear the interview shall be substituted by the suitable candidates, to make up for the minimum recommended level II operators.	
10.0	<b>WORK ALLOTTMENT:</b> The day to day work will be allotted by the concerned supervisor/ executive of NDTL at different work centres. However the continuous supervision of the MPI test shall be carried out by the Vendor	
11.0	The test results shall be recorded in a log book register maintained by NDTL at different work centres for further generation of reports through SAP by Vendor.	

<b>12.0</b>	<b>IDENTIFICATION OF TEST RESULTS:</b> The MPI tested jobs shall be identified for the status of test results .In the case of welds, a chalk mark / Paint mark or a sticker near the weld shall be used to indicate the acceptable / rejection / repair of the weld. In the case of Valves, a metal stamp indicating “MT – OK” will be punched for acceptable, where as a Red paint mark will be used for rejection/ repair.	
<b>13.0</b>	<b>RESPONSIBILITY OF VENDOR:</b> The day today maintenance and proper utilization of the MPI equipments provided by BHEL will be the responsibility of the Vendor. However in case of any major break down or malfunctioning of the equipment, Vendor shall immediately inform to the concerned area executive for necessary action	
<b>14.0</b>	Any repair / damage to the MPI equipments or accessories of BHEL due to the carelessness or misuse of the operator will be viewed seriously by BHEL and is liable for the reimbursement of the expenditure for repair from Vendor.	
<b>15.0</b>	<b>SAFETY:</b> The electrical safety precautions shall be strictly followed by the operators of the Vendor. The operators deployed by the NDT agency for testing inside shop floor, shall wear personal protective equipment and safety shoes which shall be provided by the Vendor.	
<b>16.0</b>	The vendor should make his own arrangement for stay to the place of works inside BHEL as well as Vendor's work.	
<b>17.0</b>	<b>BHEL SCOPE:</b> <ol style="list-style-type: none"> <li>BHEL will provide MPI equipments/accessories in good working condition and consumables required for the test.</li> <li>Test blocks are to be used for examination of materials and welds; to establish sensitivity will be under BHEL scope.</li> <li>Test procedures and technique sheets will be issued by BHEL</li> <li>Witness of the calibration and Magnetic Particle Testing on each item by NDT/BHEL.</li> <li>To arrange for the customer witness as per Quality plan.</li> </ol>	
<b>18.0</b>	<b>Technical &amp; personnel Requirements:</b> <ol style="list-style-type: none"> <li>Name of the firm:</li> <li>Address: <ol style="list-style-type: none"> <li><b>Details of Technical personnel employed</b> (Copies of valid certificates to be enclosed).</li> <li><b>Details of Magnetic particle testing equipment and accessories</b> available with the firm:</li> </ol> </li> <li><b>Documentary proof to be enclosed</b> for the similar work carried-out by the firm during the last 3 years.</li> </ol>	

**GENERAL GUIDELINES & INSTRUCTIONS TO BIDDERS**  
**FOR SUBMITTING OFFER**

Vendors are requested to read the following points / guidelines / instructions and ensure that the offer is prepared and submitted strictly as per the requirements. Offers with insufficient details would not be considered for evaluation. The following points / guidelines / instructions are part and parcel of the tender and non-compliance will result in rejection of offer.

**1.0 QUOTATIONS for Outsourcing of MAGNETIC PARTICLE TESTING CONTRACT AT BHEL, TRICHY**

Considering the nature of contract which requires a good amount of technical details, etc., to be submitted along with the offer as well as the confidentiality required to be maintained during the offer evaluation process, bidders are requested to submit their offers only through sealed bids. As the Annexure-III (the price bid) would not be opened before the Part A & B technical bid evaluation is completed, bidders are requested not to submit their bids through email / fax etc.

Bidders shall submit the offer in **TWO INNER ENVELOPES** as indicated below which shall be sealed in one outer envelope.

**Envelope I.** This sealed envelope should contain Technical & Un-priced Commercial Bid with document evidences for 1) Organisation Chart, 2) Previous experience in Magnetic particle testing. 3) Satisfactory acceptance to our tender specification by authorised signatory in all the pages of this tender enquiry, Compliance to Technical Bid Qualifying Criteria duly filled with bidder's responses along with relevant documentary evidences, 4) Annual Turnover, Balance Sheet for the last 3 years and 5) EMD of Rs. 1,00,000/- as detailed. This envelope should be clearly marked **"Part I - Technical and Un- priced commercial bid"**, indicating Enquiry No., **Outsourcing of MAGNETIC PARTICLE TESTING CONTRACT AT BHEL, TRICHY**, Due Date, Address and Reference of the Bidder.

**Envelope II.** This sealed envelope should contain **price details**, duly filled and signed as per ANNEXURE-III in NDT agency's letter head. This envelope should be clearly marked **"Part II - Price bid"**, indicating Enquiry No., **Outsourcing of MAGNETIC PARTICLE TESTING CONTRACT AT BHEL, TRICHY**, Due Date, Address & Reference of the Bidder

Both the envelopes I & II shall be put in one cover, duly sealed, super scribing as Part I and Part II indicating Enquiry No., **Outsourcing of MAGNETIC PARTICLE TESTING CONTRACT AT BHEL, TRICHY**, Due Date, Address & Reference of the Bidder.

The above tender (envelope containing Part I & II) should reach this office on or before the due date and time. Tenders received after due date and time will not be considered for evaluation. Tender should not be addressed to Individual's name but only by designation to:

**AGM / NDTL, Building No-1,  
 BHARAT HEAVY ELECTRICALS LIMITED  
 HIGH PRESSURE BOILER PLANT  
 TIRUCHIRAPALLI – 620 014  
 TAMIL NADU, INDIA**

Tenders should be free from **CORRECTION AND ERASURES**, Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.

Tenders should be in **ENGLISH** and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in **ENGLISH** or otherwise, the tenders will not be considered for evaluation.

BHEL reserves the right to reject any offer without assigning any reason and also enter into contract with more than one Inspection Agency by sharing each work centre depending upon the quantum of work.

If the past performance of a vendor in any of the previous Purchase orders/contracts/in any projects, of BHEL Units, and NON-BHEL, is not satisfactory BHEL then reserves the full right to reject such offers of those vendors straightaway irrespective of their suitability and will not be considered for further processing of the tender.

## **2.0 Guidelines for PART I (TECHNICAL & UN-PRICED COMMERCIAL BID)**

### **2.1 Technical**

This part shall include / indicate the following:

**2.1.1** Tenders should contain complete scope of supply with all technical details, specifications and other commercial terms and conditions. Point by point confirmation for the Technical Specification and Qualifying Criteria shall be provided.

**2.1.2** If there are any deviations, the same should be clearly specified. Tenders received without confirmation to our specification will be rejected.

**2.1.3** The contract is for a period of two years from the date of commencement of work. Approximate quantum of Magnetic Particle Testing will be as per “**ANNEXURE-III**”. There may be a variation in the estimated value of contract depending upon the production plan variation that may arise then and there. BHEL does not guarantee for the quantum of work

**2.1.4** Inspection Agency have to ensure that his workmen are covered under PF, ESI and miscellaneous provisions act of 1952 and accordingly produce documents to BHEL management, the registration/ Enrolment number before awarding of contract work. As per the provisions, every employee employed in or in connection with the work of Factory or other establishment who has not become a member already shall also be entitled and required to become a member of the fund from the date he is employed by the contractor. The employee's contribution is as notified by the PF Authority from time-to-time. The employee's contribution will be recovered by the contractor from the wages of his workmen and the contractor should make equal contribution.

### **2.2 Un-Priced Commercial Bid**

This part shall include / indicate the following

**2.2.1** The testing rates should be quoted as detailed in Scope of work as given in Annexure-II

**2.2.2** Fixed price: Prices quoted by the bidder shall be fixed and not subject to any escalation whatsoever during the period of bid validity and execution of the Purchase Order. A bid submitted with an adjustable price will be treated as non- responsive and rejected. Prices shall be written in words and figures. In the event of difference, the price written in words shall be valid and binding.

**2.2.3** The contractors are requested to offer ‘QUOTATION’ enclosing a crossed demand draft in favour of BHARAT HEAVY ELECTRICALS LIMITED for **Rs.1,00,000/-** (Rupees One Lakh only) towards **Earnest Money deposit**.

## **3.0**

The Part I - Technical & Un-priced commercial bid alone would be opened on the Tender opening date.

The Part II – The Part I would be evaluated and bidders qualifying alone will be considered for further processing. During this process, either direct meeting with contractors at BHEL, Trichy or at contractor works (which include a comprehensive technical audit on contractor's capability) may be performed at the discretion of BHEL and for which contractor is expected to give his acceptance. After selection of technically accepted bidders, BHEL would proceed with Reverse Auction route or Price Bid opening route for finalizing the party, which would be intimated to the qualified bidders after completion of the techno-commercial evaluation.

**BHEL reserves the right to go for a Reverse Auction (RA)** instead of Opening the Price Bid submitted, which will be decided after the techno-commercial evaluation. Information and general terms and conditions governing RA are given below.

#### **GENERAL TERMS AND CONDITIONS OF REVERSE AUCTION (RA)**

- Against this enquiry for the subject item/system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING ON INTERNET.
- For the proposed RA, technically and commercially acceptable bidders only shall be eligible to participate.
- In case of RA, BHEL will engage the services of a service provider for conduct of the RA who will provide all necessary training and assistance to the bidders before commencement of on line bidding on internet.
- Business rules governing the RA will be communicated to the bidders through service provider for compliance.
- Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of RA. Without the compliance, the vendor will not be eligible to participate in the event.
- BHEL will provide a sample calculation sheet (in EXCEL format) which would help the bidders to arrive at “Net Cash outflow to BHEL” considering various price / cost elements like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) etc. for each of the bidders to enable them to arrive at “Net Cash outflow to BHEL” which is the amount the bidder would be bidding during the RA.
- RA will be conducted on scheduled date & time and at the end of event, the lowest bidder value will be known on the network.
- The lowest bidder has to Fax the duly signed “Price Break-up” in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail.
- Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct further business with BHEL, as per the prevailing procedure.
- BHEL reserves the right to negotiate if needed with the “L1” vendor of the Reverse Auction

#### **4.0 GENERAL**

BHEL reserves its right to reject a vendor due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / Units.

BHEL shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHEL.

The correspondence exchanged against the tender between the bidder and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.

Any transaction / communication pertaining to the tender carried out by the bidder and BHEL round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties.

This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the parties to the business.

In case Letter of Intent (LoI) is issued through email, the computer generated time and date of mail shall be construed as the official time and date of release of LoI. In as much as this date is within the last date of validity given by the bidder the LoI is said to have been issued within the validity period and shall be binding on both the parties to the business.

**Bidders participating in the tender should declare in their technical bid that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be clearly furnished to BHEL. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BHEL about any such hold under enforcement on the subject bidder, BHEL will have every right to reject the offer of such vendors at any point of time and also under any stage of the finalisation of the subject tender irrespective of the status of the subject bidder in that tender. Such bidders will not be permitted to participate in the further tender proceedings and will be communicated suitably. They will not be also considered for any ongoing enquiries even if participated till the hold is officially lifted and confirmed in writing.**

--- --- ---

**Signature with Seal of  
Authorized signatory**



**ACCEPTANCE OF COMMERCIAL TERMS AND CONDITIONS BY THE VENDORS**

(This should be essentially filled in and sent along with the techno-commercial offer without fail. If this check list is not filled and submitted along with techno-commercial offer or if the vendor does not confirm acceptance to the terms and conditions proposed, BHEL reserves the right to reject such offer).

**CHECK LIST**

<b>Description:</b>	MAGNETIC PARTICLE TESTING CONTRACT.
<b>BHEL Tender No. &amp; Date</b>	BHE: Q: NDT: MPI: 002     25/11/2015

Sl No	Description
1	<p><b>Price Bid:</b> Price Bid should contain the schedule of price particulars and to be co-related to the technical details provided in Part I. Techno-commercial bid alone without the Price Bid will be rejected. The prices quoted shall be firm till the execution of the contract in full and in all respects.</p> <p><b>Vendor's confirmation:</b></p>
2	<p><b>Validity:</b></p> <p><b>a) <u>Validity of Contract:</u></b> The contract will be valid for a period of two year from the date of award of contract with the same rates, terms &amp; conditions. depending up on the fulfilment of BHEL requirements</p> <p><b>b) <u>Validity of the offer</u></b> Offer should be valid for a minimum period of 60 days from the date of tender opening. Please mention the validity period in the confirmation below.</p> <p><u>BHEL reserves the right not to consider offers from vendors with validity less than 60 days from the date of tender opening.</u></p> <p><b>Vendor's confirmation:</b></p>
3	<p><b><u>EMD:</u></b> The Vendors are requested to offer 'QUOTATION' enclosing a crossed demand draft in favour of BHARAT HEAVY ELECTRICALS LIMITED for <b>Rs 1,00,000/-</b> (Rupees One Lakh only) towards Earnest Money deposit. Note: <b>Without EMD the offer will not be considered for evaluation.</b></p> <p><b>Vendor's confirmation:</b></p>
4	<p><b><u>SECURITY DEPOSIT:</u></b> Successful Vendor will have to provide a Security Deposit as per specified norms for the contract value.</p> <p>a) EMD of the successful Vendor shall be converted and adjusted against the security deposit.</p> <p>b) The security deposit shall not carry any interest.</p> <p><b>Vendor's confirmation:</b></p>

5	<p><b><u>Submission of bills at NDT and terms of Payment:</u></b></p> <p>The Vendor will submit bills in sufficient copies for the certified quantum of MPI test carried out.</p> <p>BHEL -NDTL Executive will be the certifying authority.</p> <p>Payment will be made in 30 days' time.</p> <p><b>Vendor's confirmation:</b></p>
6	<p><b><u>Termination / Cancellation of Contract</u></b></p> <p>BHEL reserves the right to terminate the contract for any of the following reasons.</p> <ol style="list-style-type: none"> <li><b>1. Non-satisfactory workmanship.</b></li> <li><b>2. Any false statement given in the tender.</b></li> <li><b>3. Not attending the work when required.</b></li> <li><b>4. Non availability / Irregular in work</b></li> </ol> <p><b>Vendor's confirmation:</b></p>
7	<p><b>Reverse Auction (RA):</b></p> <p>BHEL reserves their right to conduct on-line internet Reverse Auction for finalizing the Tender. This decision will be communicated to the technically qualified vendors after technical evaluation. Details / General terms / guidelines for conduct of RA have been given in the 'General guidelines &amp; instructions to bidders' enclosed as a part of NIT. Vendors are requested to confirm their acceptance for BHEL proceeding with RA route for finalization of the enquiry.</p> <p><u>BHEL reserves the right not to consider offers from vendors not accepting to the RA process for finalization of the enquiry.</u></p> <p><b>Vendor's confirmation:</b></p>
8	<p>The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.</p> <p><b>Vendor's confirmation:</b></p>
9	<p><b>Contacts:</b></p> <p>Details of contact person's name, designation, department with complete postal and email address along with phone and fax numbers to be mentioned</p> <p>Name: Designation: Email ID: Phone No.: Fax No.: Address:</p>

**We have gone through and understood the 'General guidelines & instructions to bidders for submitting offer' enclosed as a part of the NIT and confirm that our offer has been made in line with the same.**

**(AFFIX OFFICIAL SEAL HERE)**

**Signature with date:**

**Name:**

**(PLEASE AFFIX YOUR SIGNATURE AND SEAL ON EACH PAGE)**

ENQUIRY.NO: BHE: Q: NDT: MPI: 002 DATED: 25/11/2015

**ENQUIRY FOR OUTSOURCING OF MAGNETIC PARTICLE TESTING  
CONTRACT AT *BHEL, TRICHY***

**Price Bid**

S.No	Description of Item	Approximate Workload for two years	Unit of Measurement	Rate/Unit of Measurement	Sub-Total in Rupees
<b>1</b>	<b>Stub welds, Pipe-Butt Joints &amp; Attachments, HPLP Systems, Desuperheater and Links-Wet/Dry Method</b>	<b>31614.7</b>	<b>Metres</b>		
<b>2</b>	<b>Raw Material ,Fittings, Plates, Valves, OFE Components and Pipe Bend Areas-Wet/Dry Method</b>	<b>9,980</b>	<b>Sq. Metres</b>		
<b>GRAND TOTAL (EXCLUDING SERVICE TAX) in Rupees</b>					